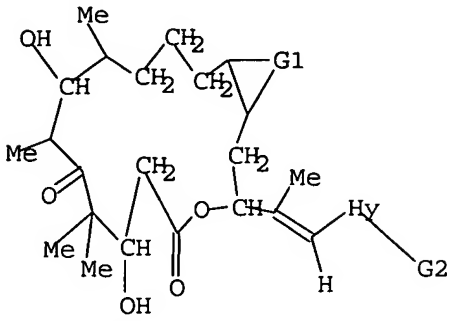
=> d l1
L1 HAS NO ANSWERS
L1 STR

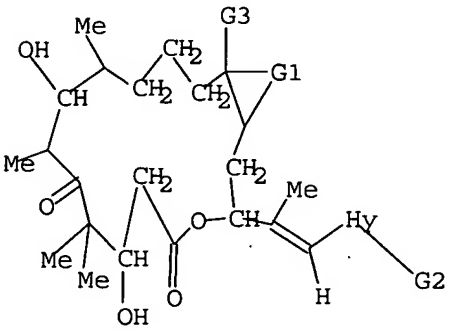


G1 O,CH2

G2 Me,S,Et,n-Pr,i-Pr,n-Bu,i-Bu,s-Bu,t-Bu

Structure attributes must be viewed using STN Express query preparation.

=> d l10
L10 HAS NO ANSWERS
L10 STR



G1 O,CH2

G2 Me,S

G3 H,Me

Structure attributes must be viewed using STN Express query preparation.

=> d his

(FILE 'HOME' ENTERED AT 16:26:43 ON 21 JUN 2005)

FILE 'REGISTRY' ENTERED AT 16:27:08 ON 21 JUN 2005
L1 STRUCTURE UPLOADED
L2 7 S L1
L3 113 S L1 FUL

6/21/05

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L4          112 S L3 AND CAPLUS/LC
L5            1 S L3 NOT L4
L6            4 S L3 AND REF.CAPLUS>10
L7          109 S L3 NOT L6

     FILE 'CAPLUS' ENTERED AT 16:30:09 ON 21 JUN 2005
L8          463 S L3

     FILE 'REGISTRY' ENTERED AT 16:30:34 ON 21 JUN 2005
L9                STRUCTURE UPLOADED
L10               STRUCTURE UPLOADED
L11           2 S L10 SAM SUB=L3
L12          42 S L10 FUL SUB=L3
L13          42 S L12 AND CAPLUS/LC
L14           4 S L12 AND REF.CAPLUS>10
L15          38 S L12 NOT L14

     FILE 'CAPLUS' ENTERED AT 16:34:14 ON 21 JUN 2005
L16          43 S L15
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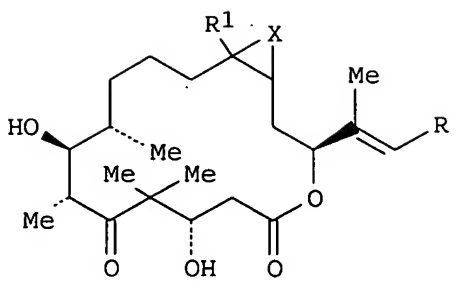
SSS 6/21/05

SRNT

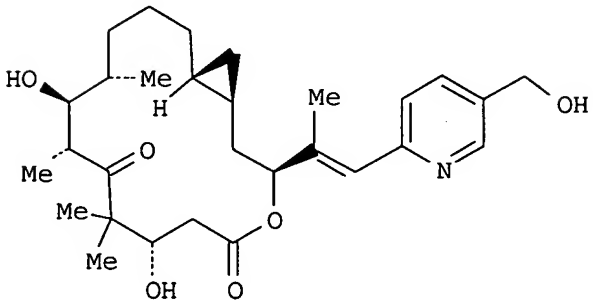
L16 ANSWER 7 OF 43 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:143161 CAPLUS
DOCUMENT NUMBER: 140:181252
TITLE: Preparation and formulation of epothilone B derivatives as antitumor agents
INVENTOR(S): Namoto, Kenji; Nicolaou, Kyriacos Costa; Ritzen, Andreas
PATENT ASSIGNEE(S): Novartis Ag, Switz.; Novartis Pharma Gmbh; The Scripps Research Institute
SOURCE: PCT Int. Appl., 89 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2004014919	A1	20040219	WO 2003-EP8554		20030801
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LT, LU, LV, MA, MD, MK, MN, MX, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SE, SG, SK, SY, TJ, TM, TN, TR, TT, UA, US, UZ, VC, VN, YU, ZA, ZW					
RW: AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR					
CA 2494259	AA	20040219	CA 2003-2494259		20030801
US 2004072870	A1	20040415	US 2003-634537		20030804
PRIORITY APPLN. INFO.:			US 2002-400535P	P	20020802
			US 2003-480933P	P	20030624
			WO 2003-EP8554	W	20030801

OTHER SOURCE(S): MARPAT 140:181252
GI



I



II

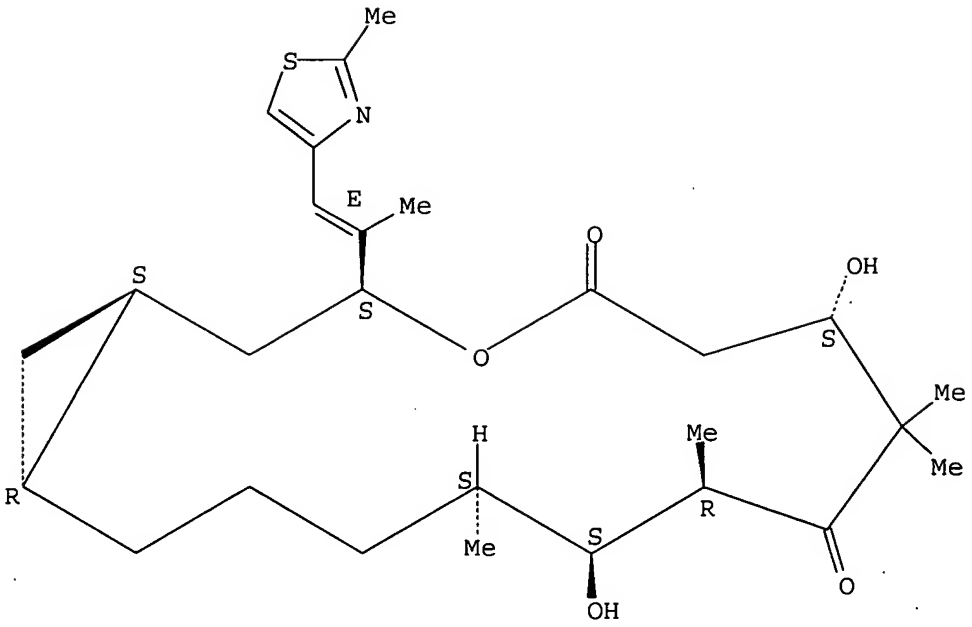
AB Epothilone B derivs. of formula I [R = (substituted) heterocyclyl; R1 = H, Me; X = O, CH2] are prepared for the treatment of proliferative diseases, such as a tumor. Pharmaceutical compns. containing I are described. Thus, II was prepared, and had IC50 of 0.7 against 1A9 human ovarian carcinoma cells.

IT **213312-56-2P 252981-48-9P 472961-71-0P 472961-80-1P 472961-82-3P 611168-32-2P 611168-34-4P 611168-35-5P 611168-36-6P 611168-37-7P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of epothilone B derivs. as antitumor agents)

RN 213312-56-2 CAPLUS

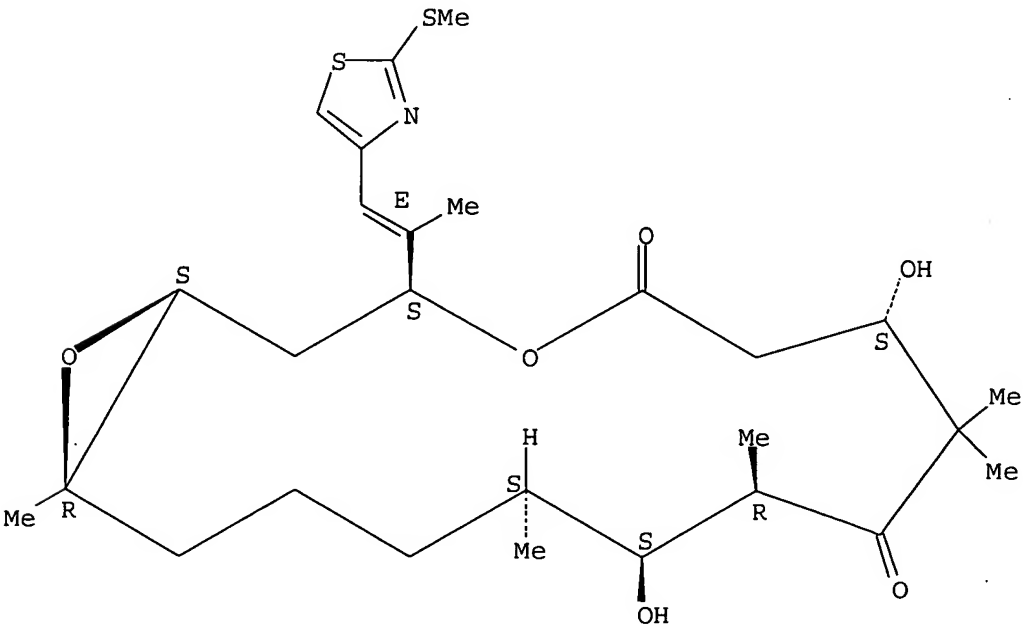
CN 4-Oxabicyclo[14.1.0]heptadecane-5,9-dione, 7,11-dihydroxy-8,8,10,12-tetramethyl-3-[(1E)-1-methyl-2-(2-methyl-4-thiazolyl)ethenyl]-, (1S,3S,7S,10R,11S,12S,16R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.



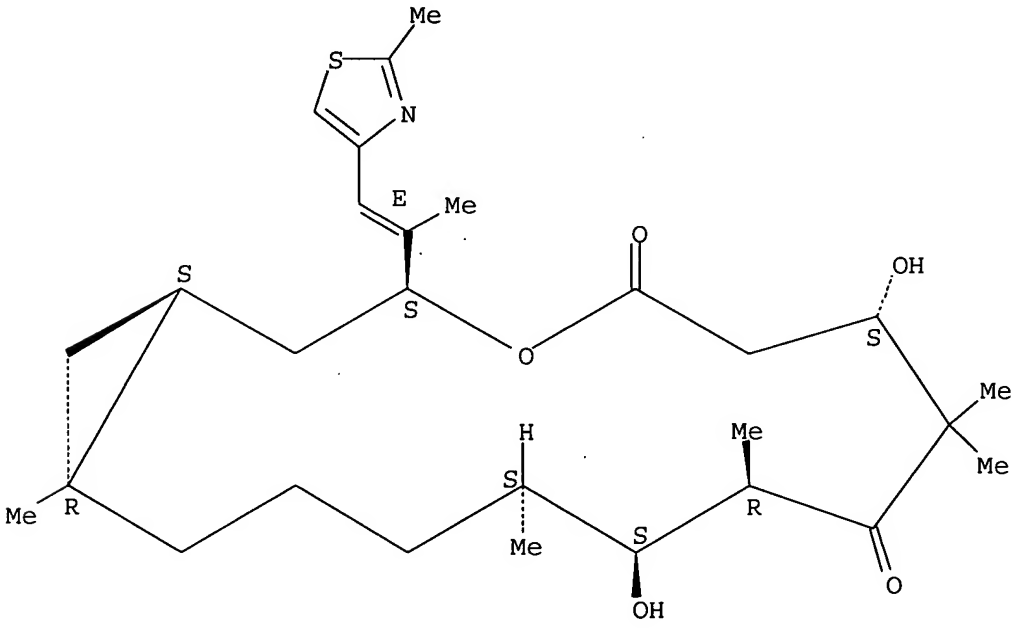
RN 252981-48-9 CAPLUS
CN 4,17-Dioxabicyclo[14.1.0]heptadecane-5,9-dione, 7,11-dihydroxy-8,8,10,12,16-pentamethyl-3-[(1E)-1-methyl-2-[2-(methylthio)-4-thiazolyl]ethenyl]-, (1S,3S,7S,10R,11S,12S,16R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.



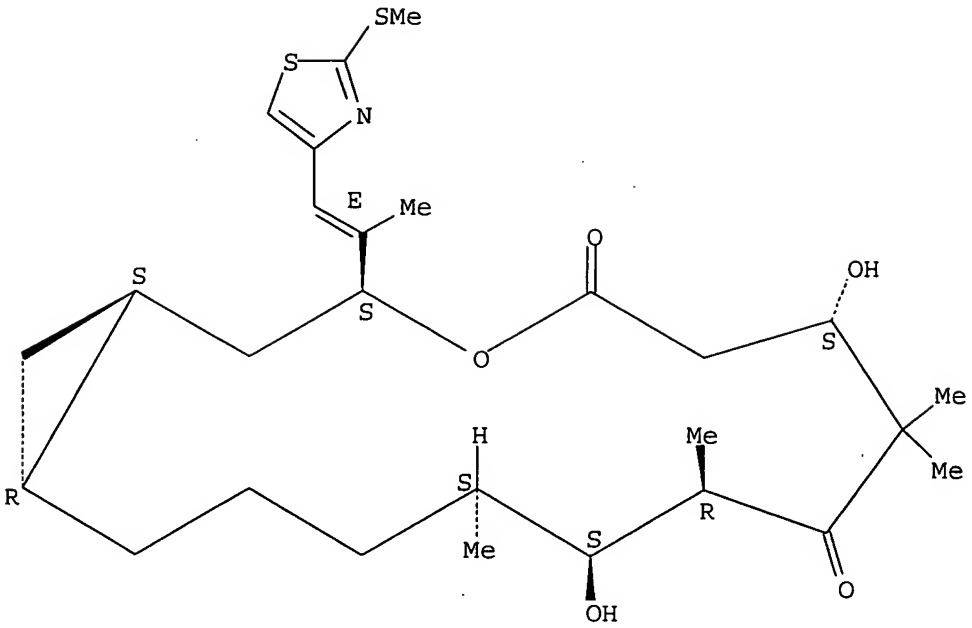
RN 472961-71-0 CAPLUS
CN 4-Oxabicyclo[14.1.0]heptadecane-5,9-dione, 7,11-dihydroxy-8,8,10,12,16-pentamethyl-3-[(1E)-1-methyl-2-(2-methyl-4-thiazolyl)ethenyl]-, (1S,3S,7S,10R,11S,12S,16R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.



RN 472961-80-1 CAPLUS
CN 4-Oxabicyclo[14.1.0]heptadecane-5,9-dione, 7,11-dihydroxy-8,8,10,12-tetramethyl-3-[(1E)-1-methyl-2-[2-(methylthio)-4-thiazolyl]ethenyl]-, (1S,3S,7S,10R,11S,12S,16R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.



RN 472961-82-3 CAPLUS
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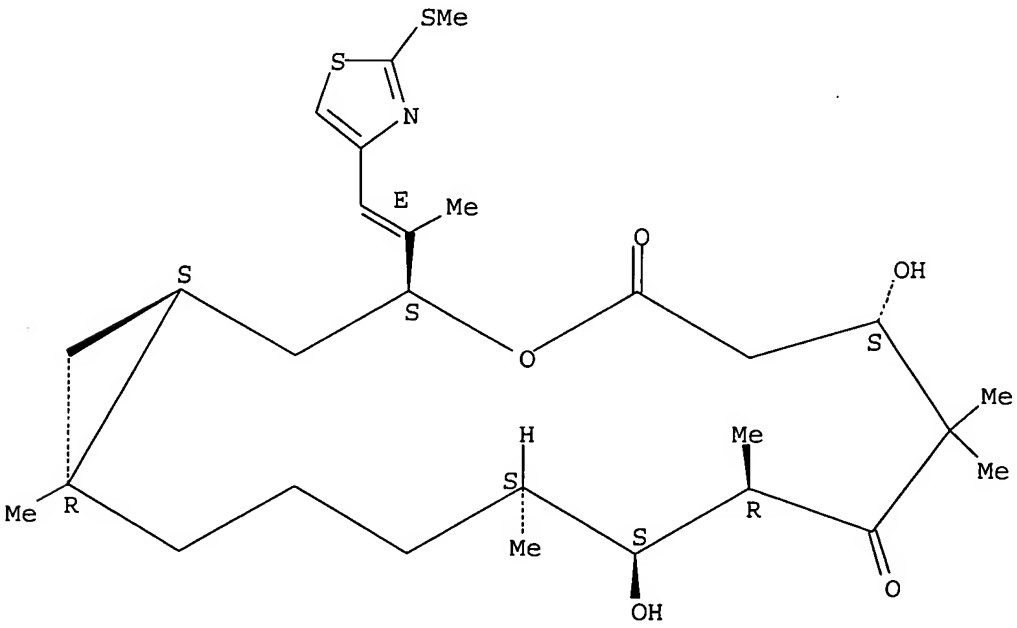
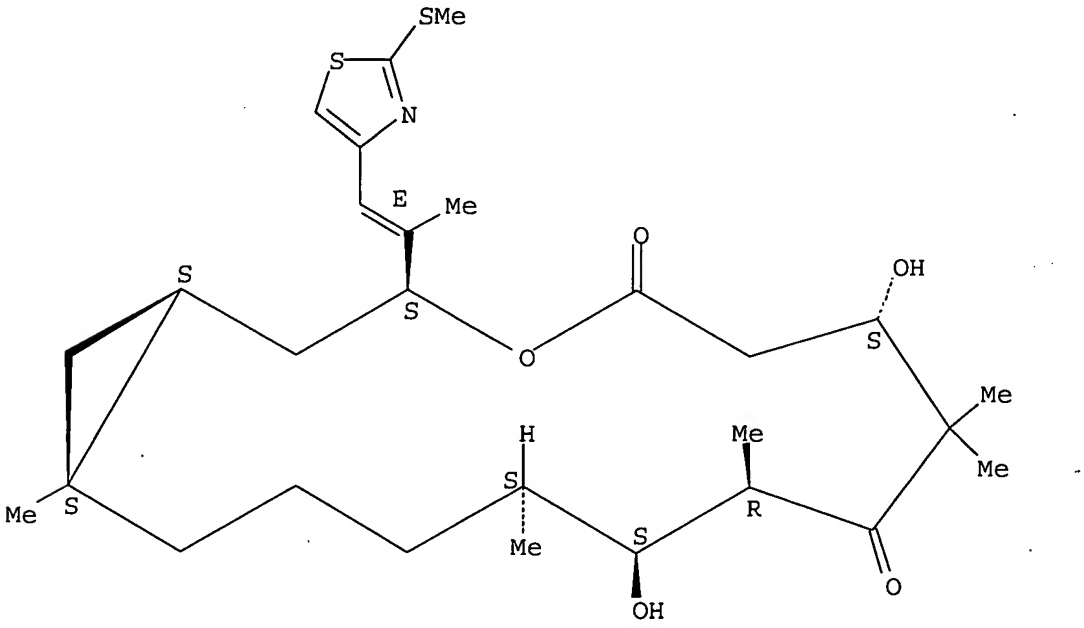
Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.



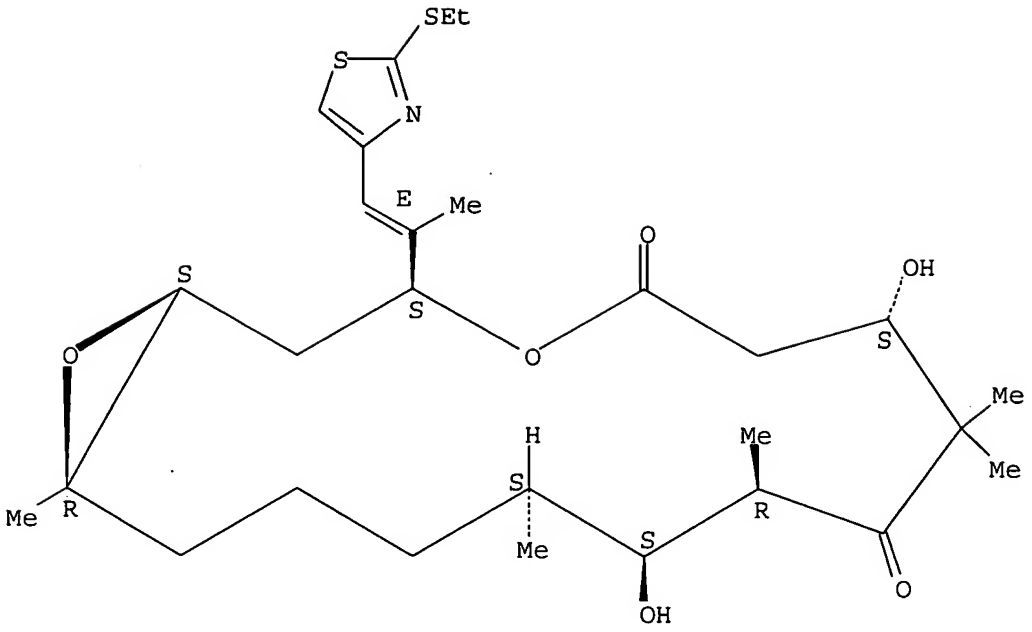
RN 611168-32-2 CAPLUS
CN 4-Oxabicyclo[14.1.0]heptadecane-5,9-dione, 7,11-dihydroxy-8,8,10,12,16-pentamethyl-3-[(1E)-1-methyl-2-[2-(methylthio)-4-thiazolyl]ethenyl]-, (1S,3S,7S,10R,11S,12S,16S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.



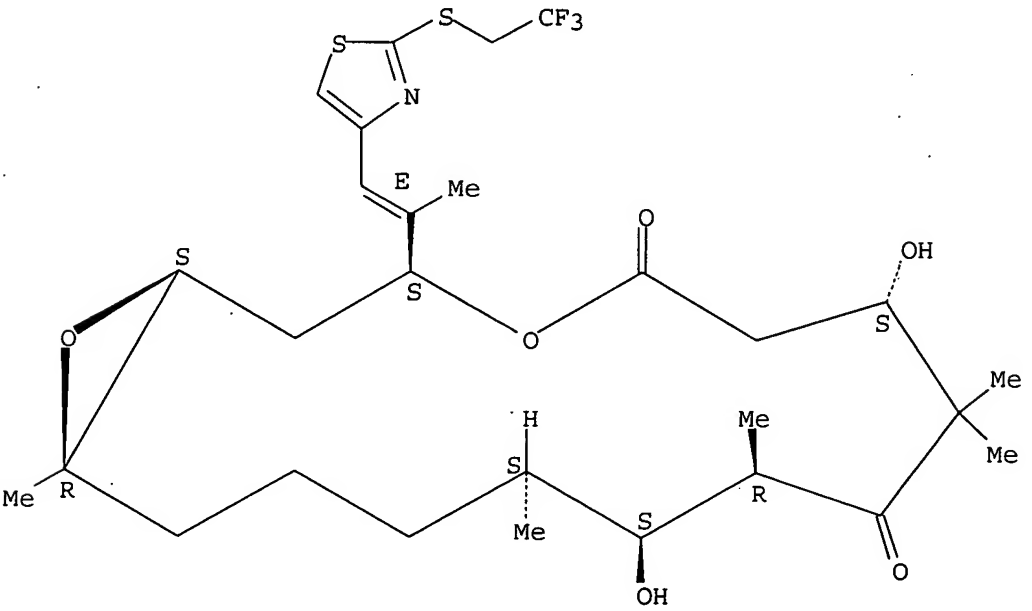
RN 611168-34-4 CAPLUS
CN 4,17-Dioxabicyclo[14.1.0]heptadecane-5,9-dione, 3-[(1E)-2-[2-(ethylthio)-4-thiazolyl]-1-methylethenyl]-7,11-dihydroxy-8,8,10,12,16-pentamethyl-, (1S,3S,7S,10R,11S,12S,16R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.



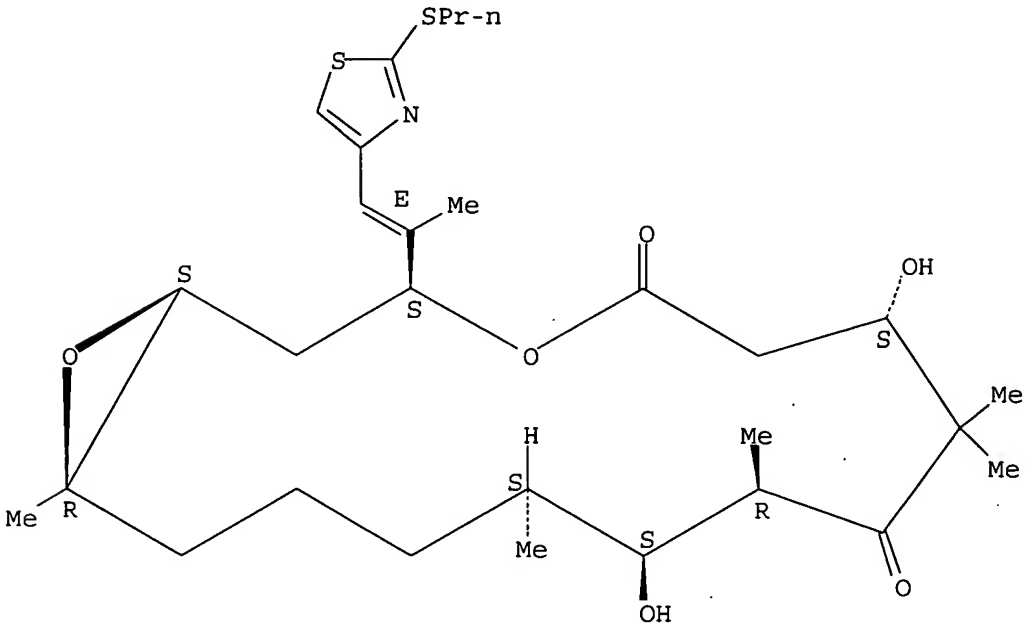
RN 611168-35-5 CAPLUS
CN 4,17-Dioxabicyclo[14.1.0]heptadecane-5,9-dione, 7,11-dihydroxy-8,8,10,12,16-pentamethyl-3-[(1E)-1-methyl-2-[2-[(2,2,2-trifluoroethyl)thio]-4-thiazolyl]ethenyl]-, (1S,3S,7S,10R,11S,12S,16R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.



RN 611168-36-6 CAPLUS
CN 4,17-Dioxabicyclo[14.1.0]heptadecane-5,9-dione, 7,11-dihydroxy-8,8,10,12,16-pentamethyl-3-[(1E)-1-methyl-2-[2-(propylthio)-4-thiazolyl]ethenyl]-, (1S,3S,7S,10R,11S,12S,16R)- (9CI) (CA INDEX NAME)

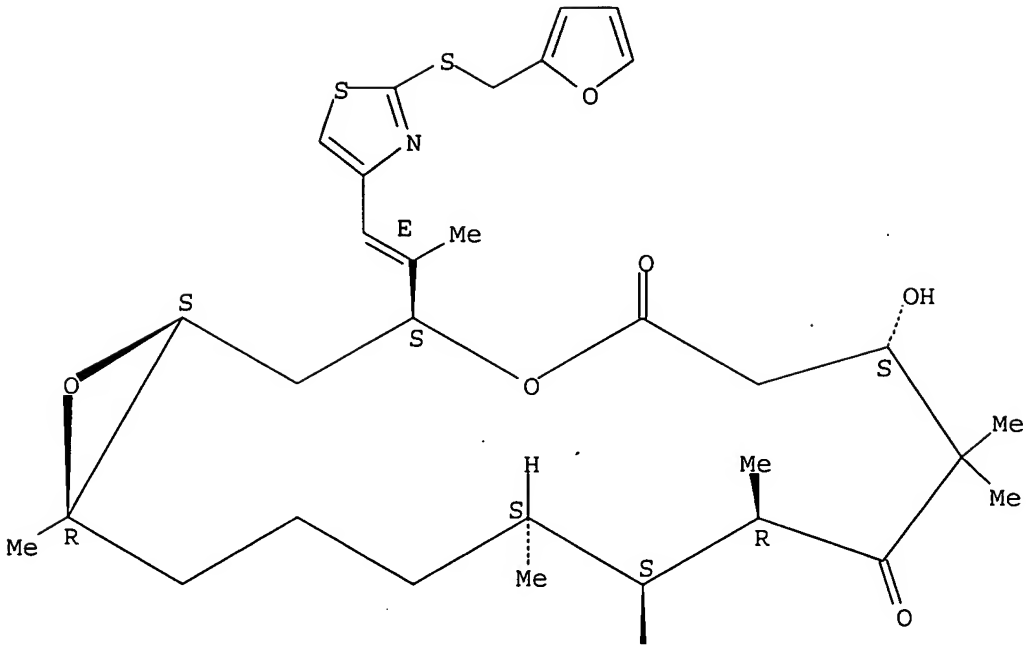
Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.



RN 611168-37-7 CAPLUS
CN 4,17-Dioxabicyclo[14.1.0]heptadecane-5,9-dione, 3-[(1E)-2-[2-[(2-furanylmethyl)thio]-4-thiazolyl]-1-methylethenyl]-7,11-dihydroxy-8,8,10,12,16-pentamethyl-, (1S,3S,7S,10R,11S,12S,16R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.

PAGE 1-A



PAGE 2-A

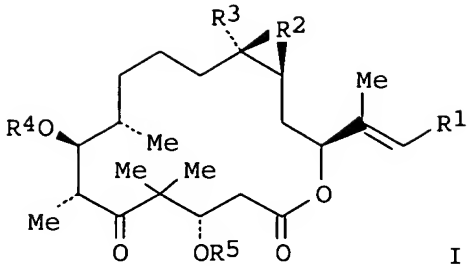
REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 29 OF 43 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1999:819378 CAPLUS
DOCUMENT NUMBER: 132:49831
TITLE: Synthesis of epothilone derivatives and their use against proliferative diseases
INVENTOR(S): Nicolaou, Kyriacos Costa; King, Nigel Paul; Finlay, Maurice Raymond Verschoyle; He, Yun; Roschangar, Frank; Vourloumis, Dionisios; Vallberg, Hans; Bigot, Antony
PATENT ASSIGNEE(S): Novartis A.-G., Switz.; Novartis-Erfindungen Verwaltungsgesellschaft m.b.H.; Scripps Research Institute; et al.
SOURCE: PCT Int. Appl., 122 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 5
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9967252	A2	19991229	WO 1999-EP4287	19990621
WO 9967252	A3	20000316		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6380394	B1	20020430	US 1998-102602	19980622
CA 2334342	AA	19991229	CA 1999-2334342	19990621
AU 9947748	A1	20000110	AU 1999-47748	19990621
AU 757854	B2	20030306		
BR 9911420	A	20010320	BR 1999-11420	19990621
EP 1089998	A2	20010411	EP 1999-931120	19990621
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, FI, RO				
JP 2002518504	T2	20020625	JP 2000-555904	19990621
NZ 508622	A	20030725	NZ 1999-508622	19990621
RU 2227142	C2	20040420	RU 2000-132188	19990621
NO 2000006378	A	20010221	NO 2000-6378	20001214
US 6531497	B1	20030311	US 2001-720070	20010419
US 2003203938	A1	20031030	US 2003-386999	20030311

PRIORITY APPLN. INFO.:	US 1998-102602	A	19980622
	US 1996-32864P	P	19961213
	US 1997-856533	B1	19970514
	US 1997-923869	A2	19970904
	WO 1999-EP4287	W	19990621
	US 2001-720070	A3	20010419

OTHER SOURCE(S): CASREACT 132:49831; MARPAT 132:49831
GI



I

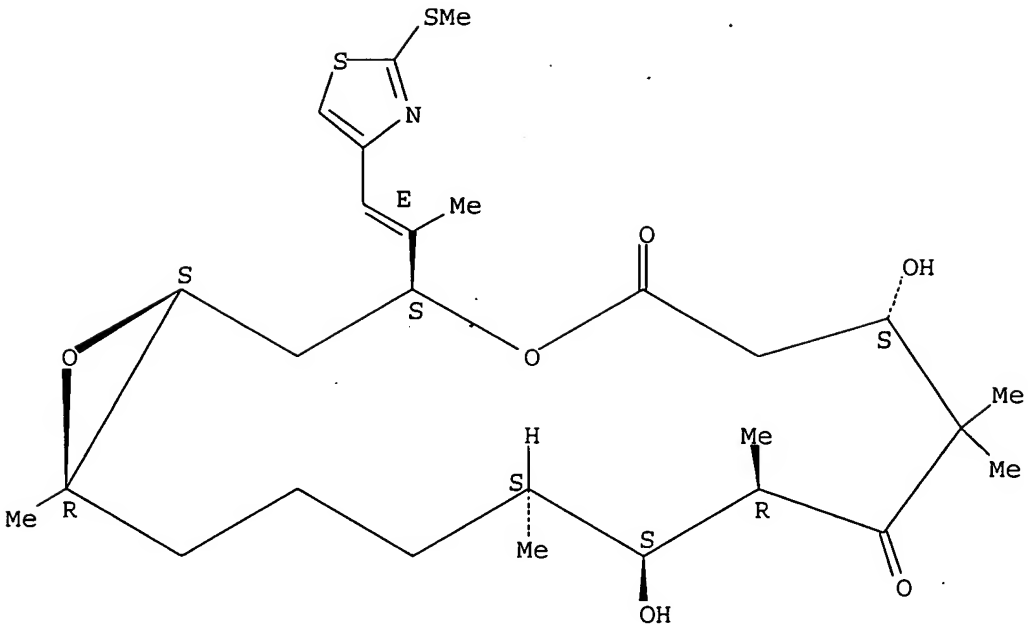
AB The invention relates to epothilone analogs I [R1 = (un)substituted imidazol-2-yl, imidazol-4-yl, imidazol-5-yl, 2-substituted 1,3-thiazol-4-yl, (un)methylated 2-pyridyl group; R2 = O, bond; R3 = H, Me, Et, Pr, CHMe2, Bu, CH2CHMe2, CMe3, pentyl, hexyl, -CH=CH2, -C.tplbond.CH, -CH2F, -CH2Cl, -CH2OH, -CH2O(C1-C6-alkyl), CH2OMe, -CH2-S-(C1-C6-alkyl), CH2SMe; R4, R5 = H, Me, protecting group] or a salt of I where a salt-forming group is present. A further aspect of the invention is related to the synthesis of epothilone E [I; R1 = 2-(hydroxymethyl)-1,3-thiazol-4-yl, R2 = O, R3 - R5 = H] via coupling of iodide I (R1 = I, R2 = bond, R3 - R5 = H) with 2-(hydroxymethyl)-4-(tributylstannyl)thiazole in DMF containing catalytic Pd(MeCN)2Cl2 followed by stereoselective epoxidn. of the ring double bond with in situ generated MeC(:NH)O2H. These compds. have inter alia microtubuli depolymn. inhibiting activity and are useful against proliferative diseases.

IT **252981-48-9P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(synthesis of epothilones and derivs. and their use against proliferative diseases)

RN 252981-48-9 CAPLUS

CN 4,17-Dioxabicyclo[14.1.0]heptadecane-5,9-dione, 7,11-dihydroxy-8,8,10,12,16-pentamethyl-3-[(1E)-1-methyl-2-[2-(methylthio)-4-thiazolyl]ethenyl]-, (1S,3S,7S,10R,11S,12S,16R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.


SMe
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